

AMENDMENTS TO THE CLAIMS

Please amend the claims as shown below, without prejudice or disclaimer. This listing of the claims replaces all prior versions and listings of claims in this application.

1-15. Cancelled

16. (Currently amended) An immunogenic composition; comprising a recombinant *Haemophilus influenzae* adhesion (Hia) protein of non-typeable strain 33 encoded by of *Haemophilus influenzae* producible by a strain of *E. coli* transformed by an expression vector comprising:
- (a) an isolated and purified nucleic acid molecule encoding a *Haemophilus influenzae* adhesion (Hia) protein of non-typeable strain 33 of *Haemophilus influenzae*, said molecule having the DNA sequence shown in Figure 18 (SEQ ID NO.: 23);
 - (b) an isolated and purified nucleic acid molecule encoding a *Haemophilus influenzae* adhesion (Hia) protein of non-typeable strain 33 of *Haemophilus influenzae*, said protein having the amino acid sequence shown in Figure 18 (SEQ ID NO.: 24);
 - (c) an isolated and purified nucleic acid molecule encoding a *Haemophilus influenzae* adhesion (Hia) protein of non-typeable strain 33 of *Haemophilus influenzae* which is amplifiable by the pair of nucleotides, SEQ ID No. 60 and SEQ ID No. 18; and,
 - (d) an isolated and purified nucleic acid molecule encoding the V38 N-truncated *Haemophilus influenzae* adhesion (Hia) protein of non-typeable strain 33 of *Haemophilus influenzae*;
- wherein said vector further comprises a promoter for expression of the nucleic acid of (a), (b), or (c); and a pharmaceutically acceptable carrier therefor.
17. (Currently amended) The immunogenic composition of claim 16 formulated as a vaccine for in vivo administration to protect such that, upon administration of the composition to a host, the host is protected against disease caused by *Haemophilus influenzae* non-typeable strain 33.
18. (Previously canceled)

19. (Original) The immunogenic composition of claim 16 formulated as a microparticle, capsule or liposome preparation.
20. (Original) The immunogenic composition of claim 16 further comprising an adjuvant.
21. (Currently amended) A method for inducing protection against disease caused by *Haemophilus influenzae* non-typeable strain 33, comprising administering to a susceptible host an effective amount of the immunogenic composition of claim 16.
22. (Original) The method of claim 21 wherein the susceptible host is a human.
- 23-29. Cancelled
30. (New) An immunogenic composition comprising a recombinant *Haemophilus influenzae* adhesion (Hia) protein of non-typeable strain 33 having the amino acid sequence of SEQ ID NO: 24, and a pharmaceutically acceptable carrier therefor.
31. (New) The immunogenic composition of claim 30 formulated as a vaccine for in vivo administration such that, upon administration of the composition to a host, the host is protected against disease caused by *Haemophilus influenzae* non-typeable strain 33.
32. (New) The immunogenic composition of claim 30 formulated as a microparticle, capsule or liposome preparation.
33. (New) The immunogenic composition of claim 30 further comprising an adjuvant.
34. (New) A method for inducing protection against disease caused by *Haemophilus influenzae* non-typeable strain 33, comprising administering to a susceptible host an effective amount of the immunogenic composition of claim 30.
35. (New) The method of claim 34 wherein the susceptible host is a human.
36. (New) An immunogenic composition comprising a truncated recombinant *Haemophilus influenzae* adhesion (Hia) protein of non-typeable strain 33 having the amino acid sequence of SEQ ID NO.: 24, beginning at valine 38.
37. (New) The immunogenic composition of claim 36 formulated as a vaccine for in vivo administration such that, upon administration of the composition to a host, the host is protected against disease caused by *Haemophilus influenzae* non-typeable strain 33.

38. (New) The immunogenic composition of claim 36 formulated as a microparticle, capsule or liposome preparation.
39. (New) The immunogenic composition of claim 36 further comprising an adjuvant.
40. (New) A method for inducing protection against disease caused by *Haemophilus influenzae* non-typeable strain 33, comprising administering to a susceptible host an effective amount of the immunogenic composition of claim 36.
41. (New) The method of claim 40 wherein the susceptible host is a human.